

Docket No. 97-2027-D

REMARKS

Claims 1-17 are pending in the present application. Claims 1-6 have been withdrawn from consideration, Claims 8-9 have been canceled, and Claims 7, 10, and 15 have been amended. Applicants request entry of new claims, Claims 18-25. Claims 7 and 10-25 are left for consideration upon entry of the present Amendment.

The Specification has been amended as discussed below.

Support for the amendment to Claim 7 with respect to fiber length of the structural component fibers can be found on lines 2-5 of page 12. Support for the amendment to Claim 7 with respect to fiber length of the randomly dispersed fibers can be found on page 15, lines 17-18.

Claims 10 and 15 have been amended to correct unintentional typographical errors and support for these amendments can be found, respectively, on page 15, line 18 and page 13, lines 15-20.

Support for Claim 18 with respect to the non-randomly dispersed fibers embedded within the first polymeric matrix can be found on page 12, lines 2-5. Support for the balance of the claim can be found at least in Claim 7.

Support for Claim 19 can be found on page 15, lines 17-18.

Support for Claims 20-25 can be found at least in Claims 10-15, respectively.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

Objection to the Specification

The specification has been objected to as failing to provide proper antecedent basis for Claims 9 and 12. Claim 9 has been canceled. With regard to Claim 12, the Examiner has stated that only "a veneer of particulate filled composite compared to a reinforced framework can be found". The Applicants respectfully point out that on page 7, lines 13-20, the specification teaches:

The prosthodontic dental restoration in accordance with the present invention comprises a fiber reinforced composite (hereinafter "FRC")

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structural component or framework and may include at least one veneer. As used herein, "veneer" is used to refer to that part of the restoration comprising a randomly dispersed, short fiber-filled and/or particulate-filled composite, as distinguished from the FRC. In one embodiment, the veneer comprises a randomly dispersed, short fiber-filled and/or particulate-filled composite (hereinafter "PFC") having a strain to failure value greater than that of the fiber reinforced framework, referred to herein as a "soft" PFC.

Furthermore, the specification as filed states on page 20, lines 10-11: "In one embodiment the randomly dispersed short fiber filled veneer is used to form a pontic or like structure on top or around the framework." Therefore, it is clear that the terminology describing veneer materials applies to pontics. In light of the foregoing teachings of the specification, the Applicants respectfully request withdrawal of the objections to the specification.

Double Patenting

Claims 16 and 17 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 24-31 of U.S. Patent No. 6,039,569. Claims 7-15 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 and 24-25 of U.S. Patent No. 6,186,790 in view of U.S. Patent No. 6,039,569. Claims 7-15 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,200,136. Applicants will provide the appropriate Terminal Disclaimers, if still required, upon resolution of all other rejections and objections.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 7-15 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent No. 5,171,147 to Burgess. In making the rejection the Examiner has asserted that since the first and second polymeric matrices claimed in the instant application can be of the same composition, the use of two composite materials is obvious. Applicants respectfully traverse this rejection.

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Burgess discloses a one piece bridge-pontic made of a single composite material comprising a resin matrix and inorganic fillers. In contrast, the pending claims 7 and 10-15 are directed to a dental restoration comprising two composite materials, a fiber-reinforced structural component having fibers, greater than about 10 mm in length, embedded within a first polymeric matrix material; and a pontic disposed on the structural component, the pontic having randomly dispersed fibers with maximum lengths no greater than $\frac{1}{4}$ inch embedded within a second polymeric matrix material.

Applicants respectfully assert that even if the two polymeric matrices of Claims 7 and 10-15 were of the same composition, the difference in the lengths of the fibers cannot make the two composites identical. Therefore, a dental restoration comprising two patentably different composite materials cannot be obvious in view of a reference that only discloses a single composite material.

New claims 18-25 are also directed to a dental restoration comprising two composite materials, a fiber-reinforced structural component having fibers that are not randomly dispersed relative to each other embedded within a first polymeric matrix material; and a pontic disposed on the structural component, the pontic having randomly dispersed fibers embedded within a second polymeric matrix material.

Applicants respectfully assert that even if the two polymeric matrices of Claims 18-25 were of the same composition, the difference in the orientation of the fibers cannot make the two composites identical. Once again, a dental restoration comprising two patentably different composite materials cannot be obvious in view of a reference that only discloses a single composite material.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a *prima facie* case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Because Burgess does not disclose the use of two composite materials in a bridge-pontic, the Examiner has not met the burden of establishing a *prima facie* case of obviousness.

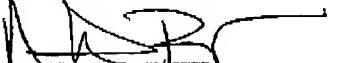
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It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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